AMENDMENTS TO THE CLAIMS

Upon entry of this amendment, the following listing of claims will replace all prior versions and listings of claims in the pending application.

Please amend claims 1-13 16-20, 22-28, and 30-32 as follows:

1. (Currently Amended) A method for virtualizing access to named system objects, the method comprising instructing a suitably programmed computer to perform the steps of:

      (a)   receiving a request to access a system object stored in a memory element provided by a computer, the request received from a process executing in ~~the~~ a context of an isolation environment, the isolation environment comprising an application isolation layer and a user isolation layer, the request including a virtual name for the system object;

      (b)   selecting, ~~from a memory element provided~~ by the computer, a rule associated with the request, the selection responsive to the application isolation layer and the user isolation layer forming the isolation environment in which the process executes;

      (c)   forming a literal name for the system object in response to the ~~determined~~ selected rule; and

      (d)   issuing, to ~~the~~ an operating system executing on the computer, a request to access the system object, the request including the literal name for the system object.

2. (Currently Amended) The method of claim 1 wherein ~~step (a) comprises: receiving a request to access a system object stored in the memory element provided by the computer, the request received from a process executing in the context of an isolation environment, the isolation environment comprising an application isolation layer and a user isolation layer,~~ the system object is selected from ~~the~~ a group consisting of a semaphore, a mutex, a mutant, a timer, an event, a job object, a file-mapping object, a section, a named pipe, and a mailslot, the request including a virtual name for the system object.

3. (Currently Amended) The method of claim 1 wherein step (a) further comprises intercepting [[a]] the request to access [[a]] the system object from a process executing in the context of an

isolation environment, the isolation environment comprising an application isolation layer and a user isolation layer, the request including a virtual name for the system object.

4. (Currently Amended) The method of claim 1 wherein ~~step (a) comprises receiving a request from a process executing in the context of an isolation environment, the isolation environment comprising an application isolation layer and a user isolation layer,~~ the request to access the system object comprises a request to open [[a]] the system object, the request including a virtual name for the system object.

5. (Currently Amended) The method of claim 1 wherein ~~step (a) comprises receiving a request from a process executing in the context of an isolation environment, the isolation environment comprising an application isolation layer and a user isolation layer,~~ the request to access the system object further comprises a request to create [[a]] the system object, the request including a virtual name for the system object.

6. (Currently Amended) The method of claim 1 wherein step (b) further comprises determining, responsive to the application isolation layer and the user isolation layer forming the isolation environment in which the process executes, that a rule action selected from ~~the~~ a group consisting of ignore, redirect and isolate, is associated with the request.

7. (Currently Amended) The method of claim 1 wherein step (b) further comprises accessing a rules engine to determine, responsive to the application isolation layer and the user isolation layer forming the isolation environment in which the process executes, a rule action associated with the virtual name included in the received request.

8. (Currently Amended) The method of claim 1 wherein step (c) further comprises forming, responsive to the application isolation layer and the user isolation layer forming the isolation environment in which the process executes, a literal name for the system object stored in the memory element provided by the computer using the virtual name provided in the request and a scope-specific identifier.

9. (Currently Amended) The method of claim 1 wherein step (c) <u>further</u> comprises forming, responsive to the application isolation layer and the user isolation layer forming the isolation environment in which the process executes, a literal name for the system object stored in the memory element provided by the computer using the virtual name provided in the request and a scope-specific identifier, the scope-specific identifier associated with an application isolation scope with which the process making the request is associated.

10. (Currently Amended) The method of claim 1 wherein step (c) <u>further</u> comprises forming, responsive to the application isolation layer and the user isolation layer forming the isolation environment in which the process executes, a literal name for the system object stored in the memory element provided by the computer using the virtual name provided in the request and a scope-specific identifier, the scope-specific identifier associated with the user isolation scope in which the process making the request executes.

11. (Currently Amended) The method of claim 1 wherein step (c) further comprises the step of forming ~~a~~ <u>the</u> literal name for the system object stored in the memory element provided by the computer identifying the system object as having global visibility.

12. (Currently Amended) The method of claim 1 wherein step (c) further comprises the step of forming ~~a~~ <u>the</u> literal name for the system object stored in the memory element provided by the computer identifying the system object as having session visibility.

13. (Currently Amended) The method of claim 1 wherein step (c) comprises forming ~~a~~ <u>the</u> literal name for the system object stored in the memory element provided by the computer that is identical to the virtual name provided in the request.

14. (Original) The method of claim 1 further comprising the step of receiving a handle from the operating system identifying the accessed object.

15. (Original) The method of claim 14 further comprising the step of transmitting the handle to the process.

16. (Currently Amended) The method of claim 1 further comprising the step of receiving a
<u>second</u> request to access the system object from a second process executing in the context of a
second isolation environment comprising an <u>second</u> application isolation layer and a <u>second</u> user
isolation <s>scope</s> layer, the <u>second</u> request including the virtual name for the object.

17. (Currently Amended) The method of claim 16 wherein step (c) <u>further</u> comprises forming,
responsive to the <u>second</u> application isolation layer and the second user isolation layer forming
[[an]] the second isolation environment in which the second process executes, a literal name for
the system object using the virtual name provided in the <u>second</u> request and a scope-specific
identifier.

18. (Currently Amended) The method of claim 17 wherein step (c) <u>further</u> comprises forming,
responsive to the <u>second</u> application isolation layer and the <u>second</u> user isolation layer forming
the <u>second</u> isolation environment in which the <u>second</u> process executes, a literal name for the
system object stored in the memory element provided by the computer using the virtual name
provided in the request and a scope-specific identifier, the scope-specific identifier associated
with an application isolation scope with which the <u>second</u> process making the request is
associated.

19. (Currently Amended) The method of claim 17 wherein step (c) <u>further</u> comprises forming,
responsive to the <u>second</u> application isolation layer and the <u>second</u> user isolation layer forming
the <u>second</u> isolation environment in which the <u>second</u> process executes, a literal name for the
system object stored in the memory element provided by the computer using the virtual name
provided in the request and a scope-specific identifier, the scope-specific identifier associated
with the second user isolation scope in which the <u>second</u> process making the request executes.

20. (Currently Amended) The method of claim 16 wherein step (c) <u>further</u> comprises forming,
responsive to the <u>second</u> application isolation layer and the <u>second</u> user isolation layer forming
the <u>second</u> isolation environment in which the <u>second</u> process executes, a literal name for the

system object stored in the memory element provided by the computer that is identical to the virtual name provided in the request.

21. (Previously Presented) The method of claim 1 further comprising the step of receiving a request to access the system object from a second process executing in the context of the user isolation layer, the request including the virtual name for the object.

22. (Currently Amended) The method of claim 21 wherein step (c) further comprises forming, responsive to the application isolation layer and the user isolation layer forming the isolation environment in which the second process executes, a the literal name for the system object using the virtual name provided in the request and a scope-specific identifier.

23. (Currently Amended) The method of claim 22 wherein step (c) further comprises forming, responsive to the application isolation layer and the user isolation layer forming the isolation environment in which the second process executes, a the literal name for the system object using the virtual name provided in the request and a scope-specific identifier, the scope-specific identifier associated with an application isolation scope with which the second process making the request is associated.

24. (Currently Amended) The method of claim 22 wherein step (c) further comprises forming, responsive to the application isolation layer and the user isolation layer forming the isolation environment in which the second process executes, a the literal name for the system object using the virtual name provided in the request and a scope-specific identifier, the scope-specific identifier associated with the user isolation scope in which the second process making the request executes.

25. (Currently Amended) The method of claim 21 wherein step (c) further comprises forming, responsive to the application isolation layer and the user isolation layer forming the isolation environment in which the second process executes, a the literal name for the system object that is identical to the virtual name provided in the request.

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26. (Currently Amended) An apparatus for virtualizing access to named system objects comprising:

computer-readable program means for receiving a request to access a system object from a process executing in ~~the~~ a context of an isolation environment, the isolation environment comprising an application isolation layer and a user isolation layer, the request including a virtual name for the system object;

computer-readable program means for forming a literal name for the system object responsive to the application isolation layer and the user isolation layer forming the isolation environment in which the process executes; and

computer-readable program means for requesting access to the system object using the literal name.

27. (Currently Amended) The apparatus of claim 26 wherein the computer-readable program means for receiving ~~a~~ the request further comprises intercepting ~~intercepts~~ a request to open a system object.

28. (Currently Amended) The apparatus of claim 26 wherein the computer-readable program means for receiving the ~~a~~ request further comprises intercepting ~~intercepts~~ a request to create a system object.

29. (Previously Presented) The apparatus of claim 26 further comprising computer-readable program means for storing a rule associated with the request.

30. (Currently Amended) The apparatus of claim 29 wherein the computer-readable program means for storing ~~a~~ the rule further comprises a database.

31. (Currently Amended) The apparatus of claim 26 wherein the computer-readable program means for forming ~~a~~ the literal name for the system object further comprises forming ~~forms~~, responsive to the application isolation layer and the user isolation layer forming the isolation environment in which the process executes, a literal name for the system object that is identical to the virtual name.

32. (Currently Amended) The apparatus of claim 26 wherein the computer-readable program means for forming a the literal name for the system object forms further comprises forming, responsive to the application isolation layer and the user isolation layer forming the isolation environment in which the process executes, a literal name for the system object using the virtual name and a scope-specific identifier.

33. (Original) The apparatus of claim 32 wherein the scope-specific identifier is associated with an application isolation scope with which the process making the request is associated.

34. (Original) The method of claim 32 wherein the scope-specific identifier is associated with the user isolation scope in which the process making the request executes.